

## FACTS YOU SHOULD KNOW ABOUT WATER

Drinking water provided by the City of North Miami is always safe and sanitary. The City of North Miami strictly adheres to the standards established by the United States Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP). We take, very seriously, our responsibility of providing safe drinking water. Our water meets or exceeds all the EPA and FDEP drinking water standards.

We assure you that the drinking water in the City of North Miami is always clean and safe.

Still there is more you should know. Have you ever wondered where our water comes from or what minerals and chemicals are found in our water? This brochure was created to provide this information to you.

#### **CONSUMER CONFIDENCE REPORT 2003**

The City of North Miami is located in South Florida. We enjoy one of the most beautiful and diverse coastal climates in the world. To the west we have the Everglades which, in itself, is a very unique ecosystem, and to our east we have the Atlantic Ocean. Consequently, water is one of our most important and precious resources.

#### From the Wells

The City of North Miami Water and Sewer Utility serves a population of approximately 70,000 people in a 13 square-mile area. Our customers are located within the City of North Miami, unincorporated Miami-Dade County, Miami Shores, and the Village of Biscayne Park. We also provide emergency interconnects to the municipalities of North Miami Beach and Opa Locka.

The City's Winson Water Plant at Sunkist Grove supplies water to the western portion of the service area. This is approximately all of the area west of NE 8<sup>th</sup> Ave. The Water Plant treats and pumps an average of 8.5 million gallons of water a day. The water is pumped to the water plant from an underground geologic formation known as the Biscayne Aquifer (where water is naturally stored). The water is pumped from 8 wells located on the west side of the City of North Miami.

The eastern portion of our service area, approximately all of the area east of NE 8<sup>th</sup> Avenue, is supplied by Miami-Dade Water Department. The Hialeah and John F. Preston water treatment plants consume an average of 4.3 million gallons of water a day and accounts for approximately 34% of the total water supplied to customers in the City of North Miami on a daily basis. This water is also supplied to these plants from the Biscayne Aquifer.



### **Treating Your Water**

The City of North Miami at the present time operates one lime softening water treatment plant. The water from the Biscayne Aguifer (ground water) contains many minerals e.g. calcium and magnesium Treatment is necessary to reduce the levels of these minerals and prevent build up in the pipes and discoloration of household fixtures. Aeration is the first treatment process. It removes unwanted carbon dioxide and hydrogen sulfide that can cause a bad taste and odor to the water if not removed. Next sodium-hypochlorite acid (liquid chlorine) and lime are added to destroy bacteria and remove some of the minerals for the purpose of softening the water and reducing levels of iron. Without this process, your plumbing fixtures would become stained by iron deposits. From there the water flows through anthracite coal filters to remove any suspended particles. Fluoride is then added to the water, to help prevent tooth decay in children and adults. Before the water is pumped into the storage tanks, additional sodium-hypochlorite acid (liquid chlorine) and ammonia are added to retain adequate levels of disinfection as it makes its way through the distribution system consisting of more than 301 miles of water pipe lines that transports the treated water into your home or business. Quality Assurance testing is performed every hour by state licensed water treatment operators to ensure that the water leaving our water plant meets or exceeds all federal, state and local regulations, as well as the City's own quality standards.

The City of North Miami is committed to the task of ensuring that every drop of water delivered to our customers is completely safe to drink. We are proud of our record of quality and our compliance with all established contaminant levels.

### **Use Your Water Wisely**

The typical North Miami water customer is a family of three persons who uses about 103,000 gallons of water each year. All of this water is treated according to the drinking standards described in this brochure, even though less than 2% (approximately 2,000 gallons) is actually used for drinking and cooking. Approximately half of the remaining 101,000 gallons is used indoors; the other half is used for irrigation, washing cars, etc...

#### **Understanding Water Quality Measurements**

Today's state-of-the-art laboratory equipment and sophisticated measuring techniques enable us to determine and measure exactly what is in your water in units as small as parts per billion. The water quality analysis reports the presence of chemicals, minerals and compounds in milligrams per liter (mg/L), measurements that are equivalent to parts per million for roughly the same as: 1 penny in \$10,000, 1 minute in 2 years, or 1 inch in 16 miles.

## Health and Safety Standards

The United Sates Environmental Protection Agency (EPA) and the State of Florida Department of Environmental Protection (FDEP) set both primary and secondary standards to ensure public water is safe to drink. Primary Standards protect public health against substances that may be harmful to humans if consumed for long periods of time. Secondary standards control the aesthetic qualities of the water such as taste, odor and clarity. These secondary standards do not impact public heath. To ensure microbiologically safe water, the City of North Miami collects more than 80 water samples a month from the City's distribution system.



The City's water is always in compliance with microbiological standards. These standards include the Maximum Contaminant Level (MCL) shown in the Water Quality Analysis Data Table. MCL's are the highest level of a contaminant that is allowed in drinking water; your water is within these standards. The analysis also indicates the Maximum Contaminant Level Goals (MCLG).

The presence of contaminants in drinking water does not necessarily indicate that it poses a health risk. Some customers with special health concerns may be more vulnerable to effects of contaminants in the drinking water. Immuno-compromised persons, such as persons undergoing chemotherapy; recipients of an organ transplant, HIV/AIDS or other immune system disorders; some elderly and infants can be at risk for infection. These persons should seek advice from their healthcare provider about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium(1) and microbial contaminants are available from Safe Drinking Water Hotline 1-800-426-4791. This organism is primarily associated with surface water sources; ours is a ground water source.

(1) Microscopic organism that, when ingested, can result in diarrhea and other gastrointestinal symptoms.

#### **Total Trihalomethanes**

Trihalomethanes are a by-product of the chlorination process. Research has indicated that people who drink water containing to tal Trihalomethanes (TTHM) in excess of the Maximum Contamination Levels (MCL) over a period of years may have an increased risk of contracting cancer. Your water has never exceeded the established MCL's.

## **Lead and Copper**

The presence of lead and copper in drinking water could pose a risk to public health. As a part of a federal effort to monitor the presence of these contaminants in water, and to decrease the public's exposure, the EPA has established "The Lead and Copper Rule".

This rule sets action levels for lead and copper, and means that specific concentration of lead or copper triggers additional treatment or other requirements that must be completed by the Water and Sewer Utility. The City of North Miami has completed all other required testing and after analyzing water samples from 60 randomly selected homes, the water distribution system was found to be in full compliance, for both lead and copper.

#### **Nitrate**

Even though your water has never exceeded the established MCL's (refer to the Water Quality Data sheet). The EPA requires the following information be included in this report. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrates levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you care for an infant you should ask advice from your health provider.

#### **Security of Your Water**

The City of North Miami has completed its Water Utility Vulnerability Assessment as required by the EPA. The overall goal of this process is to develop recommendations that provide cost-effective and balanced security protection systems. The City of North Miami is committed to implementing procedures and processes that will keep the security of your water at the highest level economically possible.

## The Mission Of The City of North Miami Utilities

The City of North Miami water utility mission is to provide an ample supply of high quality safe drinking water to all North Miami customers by achieving the following objectives:

- Protect public health by distributing safe, potable water to all customers
- Maintain adequate pressure and volume to meet fire protection requirements
- Keep utilities costs as low as possible while complying with all applicable regulations.

The City is proud that its water system has not exceeded any of the established contaminant levels.



## 2003 WATER QUALITY DATA

RADIOLOGICAL CONTAMINANTS (pCi/L)	ALPHA EMMITTER (pCi/L)	RADIUM 226 (pCi/L)	RADIUM 228 (pCi/L)	RADON (pCi/L)
State MCL (b)	15	5	4	NE
Federal MCL (b)	15	5	4	NE
Federal MCLG (a)	0	0	4	NE
WINSON WATER PLANT	0.9	0.2	1	NE
JOHN E. PRESTON WATER PLANT	1.1	NE	NE	7
HIALEAH WATER PLANT	1.3	NE	NE	3
Major source of contaminant	Erosion of natural deposits	Erosion of natural deposits	Erosion of natural deposits	Naturally occurring in soil and rock formations

INORGANIC CONTAMINANTS (ppb)	BARIUM (ppm) (e)	COPPER (ppm) (f)	FLUORIDE (ppm) (g)	NITRATE (as N) (ppm)	NITRITE (as N) (ppm)	SODIUM (ppm)
State MCL (b)	2	AL=1.3	4	10	1	160
Federal MCL (b)	2	AL=1.3	4	10	1	NE
Federal MCLG (a)	2	1.3	4	10	1	NE
WINSON WATER PLANT	BDL	0%	0.76	0.03	0.013	16.8
JOHN E. PRESTON WATER PLANT	0.008	0%	0.70	ND	ND	35
HIALEAH WATER PLANT	0.007	0%	0.90	ND	ND	31
Major source of contaminant	Erosion of natural deposits	Corrosion of household plumbing system	Erosion of natural deposits; water additive which promotes strong teeth	Erosion of natural deposits; runoff from fertilizer	Erosion of natural deposits; runoff from fertilizer use	Erosion of natural deposits and seawater

INORGANIC CONTAMINANTS (ppb)	LEAD (ppb) (f)	NICKEL (ppb) (e)	ARSENIC (ppb) (e)
State MCL (b)	AL=15	100	10
Federal MCL (b)	AL=15	NE	10
Federal MCLG (a)	0	NE	NE
WINSON WATER PLANT	0% Exceeded AL	BDL	0
JOHN E. PRESTON WATER PLANT	N/A	BDL	1
HIALEAH WATER PLANT	N/A	BDL	1
Major source of contaminant	Corrosion of household plumbing	Corrosion of bronze	Erosion of natural deposits

MICROBIOLOGICAL AND VOLATILE ORGANIC CONTAMINANTS	TOTAL COLIFORM ©	TRIHALOMETHANES (ppb) (d)
State MCL (b)	5%	80
Federal MCL (b)	5%	80
Federal MCLG (a)	0%	0
WINSON WATER PLANT	0%	39.3
JOHN E. PRESTON WATER PLANT	0.52%	39.0
HIALEAH WATER PLANT	0%	18.0
Major source of contaminant	Naturally present in the environment	Byproduct of drinking water chlorination

## **Abbreviation & Notes**

AL= Action Level

PPM = parts per million or milligrams Per Liter (mg/L)

PPB = parts per billion or micrograms per Liter (ug/L)

ND = None Detected

NE = None Established

N/A = Non Applicable

pCi/L = Pico Curies per Liter

BDL = Below detection limits0

- (a) Federal Goal = MCLG = Maximum Contaminant Level Goal
- (b) MCL = Maximum Contaminant Level
- (c) A minimum of 80 samples for total coliform bacteria testing are collected each
- month from the distribution system, in compliance with state regulations (d) 16 Total Trihalomethanes samples are collected for testing each year, from distribution system in compliance with state regulations. This is based on a running average.
- (e) Testing for arsenic, barium, nickel, sodium, and gross alpha every three years in compliance with State's monitoring framework.
- (f) 90th percentile value reported. If the 90th percentile value doesn't exceed the AL (less than 10% of prescribed corrosion control measures) every 3 years 60 samples are taken from 60 homes.
- (g) Fluoride testing to demonstrate compliance with State regulations. Fluoride levels are monitored daily at the treatment plant., where fluoride is added to promote strong teeth

# City of North Miami Water & Sewer Rates

Effective October 1, 2003

The following rates are currently in effect for residents water and sewer use only

And are based on a 5,000 monthly / 15,000 gallon quarterly use minimum

	CITY CODE	MONTHLY 5,000 USE INSIDE CITY	QUARTERLY 15,000 USE INSIDE CITY	QUARTERLY 15,000 USE OUTSIDE CITY
Water (minimum) Over 5,000 Monthly / 15,000 quarterly \$.94 per 1,000 gallons	WT	\$7.00	\$21.00	\$21.00
Sewer Charged @ 31% of the water rate	SR	\$2.17	\$6.51	\$6.51
Sewer Treatment Rate Charged @ \$2.00 per 1,000 No Minimum	STR	\$13.30	\$39.90	\$39.90
County Service Fee Charged @ 7.5% of total WT, SR, STR and OWSS	CSF	\$1.69	\$5.06	\$5.06
Utility tax (10% of Water Rate)	UT			\$2.10
Outside City Water & Sewer Surcharge Charged @ 25% of WT, SR, and STR	owss			\$16.85
Example Minimum Water & Sewer Bill 5,000 monthly / 15,000 quarterly		\$21.95	\$72.47	\$92.68

TURN OFF FOR NON-PAYMENT, ILLEGAL TURN ON OF WATER METER, RETURN CHECK CHARGE AND TURN OFF FOR RETURN CHECK ... \$20.00 EACH METER TAMPERING ... \$100.00 TEMPORARY OFF SERVICE ... \$10.00

